

ABSTRACT

A swash plate plunger type hydraulic motor is constituted such that plungers are slidably disposed in respective plunger holes of a motor cylinder, and a motor rolling member having a motor swash plate member is supported in a motor casing in such a manner that it can tilt and roll. A swash plate tilting angle detector for detecting the angle of a swash plate includes an angle detector mounted to a transmission housing and a rotation connection mechanism for connecting the motor rolling member to the angle detector. The rotation connection mechanism includes a first connection rod which is connected to the motor rolling member coaxially to its tilting and rolling axis, a second connection rod connected to the angle detector, and a movable or universal joint for connecting the first connection rod to the second connection rod. The described motor provides a swash plate tilting angle detector which has a high degree of freedom of installation position and permits the displacement of the center position thereof without affecting detection accuracy.